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ABSTRACT

Most school administrations rely on one of two main forms of social control to ensure teacher conformity with organizational goals. The first, feedback and socialization, depends on teachers' attitudinal and behavioral conformity, commitment, and personal involvement in maintaining high standards. The second, programming and sanctions, depends on a system of punishments and rewards to ensure conformity. Data from 52 elementary schools in a large urban school system revealed that greater reliance on the feedback and socialization mode leads (1) to higher teacher conformity and (2) to a correspondingly high level of student achievement. Control by sanctions, conversely, has a negative effect on conformity and on achievement. Data also revealed that the negative relationships between the sanctions mode of control and conformity are greatest in schools where the average amount of teacher training and experience is lowest. This study concludes that administrators can, therefore, affect student achievement by using feedback and socialization as a way of achieving organizational coordination and control. Appended are 3 tables, 11 figures, 10 notes, and a 16-item bibliography. (IW)

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PROFESSIONALISM, POWER AND PERFORMANCE:

The Relationships Between Administrative Control, Teacher Conformity and Student Achievement

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PROFESSIONALISM, POWER AND PERFORMANCE:

The Relationships Between Administrative Control
Teacher Conformity and Student Achievement

All organizations need coordination and control (Hage, 1980, p. 351). This is not to say that all organizations fulfill these needs, but teamwork is necessary if goals are to be achieved effectively. If members of the organization work at cross purposes, or if they are not motivated to work for the interests of the organization, the accomplishment of goals will be thwarted. When organizations grow in size and their activities become increasingly differentiated, it is more difficult to integrate the various parts, and individual members tend to lose sight of their common purpose. Urban school administrators must, therefore, contend with issues of coordination and control that are less problematic in smaller suburban or rural school systems, i.e., how to ensure that all members of the school system are working together toward common goals.

Background

Hage (1980) has postulated that coordination and control can be achieved in two basic ways: either by feedback and socialization, or by programming and sanctions.[1] In the latter case there are plans, rules and regulations defining members' behaviors, and a system of rewards and punishments to ensure conformity to those rules. In the case of the feedback/socialization mode there is reliance on a continuous flow of information as a method of coordination. When errors occur, it is assumed to be due to lack of information, or lack of training. Thus, members need to be given new information or training to correct the errors. As Hage notes, "pressure comes not so much from formal sanctions, in the strict sense of the term, as from

peer pressures and inner standards of quality developed through socialization" (p. 352).

Although, in practice, organizations use a combination of these two mechanisms of control, one or the other generally predominates. One determinant of the major means of control is the degree of complexity of the task. The programming/sanctions mode is characteristic of bureaucratic organizations where tasks are more routinized, and the feedback/socialization mode tends to be dominant in professional organizations due, in large part, to greater task complexity.[2]

Organizational goals may be another determinant of type of control utilized. As Etzioni (1975) notes, organizations serving culture goals, such as schools, functionally require a normative compliance structure (feedback/socialization), whereas those with economic goals require a utilitarian compliance structure (sanctions/rewards).

Conformity to organizational norms is presumably greater when the mode of control is appropriate. Etzioni (1975) states, e.g., that "organizations that serve culture goals have to rely on normative powers because the realization of their goals requires positive and intense commitment of lower participants to the organization....and such commitments cannot be effectively attained by other powers" (p.114). Warren (1986) found that the degree of staff professionalism influenced the relationship between the type of control mechanism utilized and conformity. In elementary schools with a highly professional staff, legitimate, expert and referent power (the latter two are similar to Hage's feedback/socialization dimension) were positively associated with conformity. Coercive and reward power (the programming/sanction dimension) were not. However, with a <u>less</u> professional staff, both coercive as well as referent power were correlated with conformity. Warren

distinguished between attitudinal and behavioral conformity and their relation to types of power. Coercive and reward power were associated with behavioral conformity only (teachers did what was expected, but would have preferred not to), whereas legitimate, referent and expert power were associated with both behavioral and attitudinal conformity (teachers agreed with the norms defining their behavior).

Etzioni (1975) has summarized the results of a number of compliance studies. In comparing blue-collar and white-collar workers, Franklin (1972) found that more normative power (feedback/socialization) had very little effect on blue-collar workers, but a positive effect on the commitment of white-collar workers. Both socialization and communication were related to consensus in a study of directors of civil defense (Klogan, Mulford and Tweed, 1974) and in a study of campus fraternities (Mulford, Woodman and Warren, 1973). Miller (1967) surveyed two units of an aerospace corporation and found that the more normative the incentive and the more participating the control, the more positive the involvement of workers, whereas the more utilitarian the incentive and the more directive the control, the more negative the involvement.

These studies of conformity or compliance do not deal with the question of effectiveness. Rather, it is assumed that when organizational members conform to the demands of the organization, organizational goals will be accomplished more effectively. Organizations will, thus, be more effective if their means of coordination and control are congruent with the nature of the task, the goals of the organization, or the degree of staff professionalism because in such organizations conformity will be greater. Of course, in the real world organizations pursue multiple goals, have various tasks, and are influenced by socio-cultural environmental factors. The degree of commitment

or involvement displayed by organizational members may be determined, in part, by their previous value commitments or their memberships in other organizations. Thus, the relationship between mode of control and conformity may be affected by a host of other factors.

Our interest here, first of all, is to empirically examine the relationship between control, conformity, and outcome and secondly, to ascertain whether or not there is variation in this relationship depending on certain characteristics of organizational members.

Hypotheses

Elementary schools are considered semi-professional organizations. The teaching activity seems to be becoming increasingly complex. There is a growing awareness that different children have different needs. New teaching techniques and programs are constantly being developed in an attempt to meet the varying needs of children. Teachers must continuously re-educate themselves to "keep up," and in some school districts salary increments are tied to continuous teacher training. There are now specialists in most school districts, whose areas of expertise are geared to deal with social, emotional and/or learning difficulties. The educative task, then, is a diverse and varied one requiring commitment and competence on the part of teachers. Therefore, the feedback/socialization mode of coordination and control would seem to be the more appropriate one in elementary schools, and because it is more appropriate, teacher conformity will be greater when it is utilized. Further, we expect that teacher conformity will result in higher student achievement. Conversely, a reliance on the programming/sanctions mode of control will have an adverse effect on conformity and, thus, on outcome. The relationship between mode of control and outcome is an indirect one, in that mode of control affects conformity which, in turn, affects achievement.

Essentially, we are proposing a path model as illustrated in Figure 1.

INSERT FIGURE 1 HERE

Socialization of staff members begins in universities where teachers are trained. Some teachers have had more university training than others. Teachers who have been teaching for a longer period of time have had more on-the-job training. Some schools, then, will have a more professional staff - as determined by both college training and experience - than others. In such schools the feedback/socialization mode of control should have a stronger positive correlation with conformity than in schools with a less professional staff. We shall examine the path model in both highly professional and less professional schools in order to determine the difference.

Data Collection and Measurement of Variables

Data were collected from all 52 elementary schools in one large urban system. Questionnaires were distributed to all classroom teachers third grade level and above in May 1981.[3] The responses received numbered 850, or 75 percent of the total.

The organizational variables were measured by indices created from questionnaire items. Thus, they are subjective measures. The indicator of the feedback/socialization mode of social control consists of questionnaire items eliciting the frequency of administrative classroom visits, feedback about performance, formal and informal professional contact with others in the school.[4] The programming/sanctions mode of control is determined by questionnaire items which indicate that teachers have to follow procedures which often conflict with their own judgment and that a superior must approve action taken by the staff.[5]

Teacher conformity is measured in three ways. Two are attitudinal measures and the third is behavioral. The attitudinal indicators concern both the expectations for achievement which teachers have of students and the degree of commitment and satisfaction which teachers have.[6] Increasing student achievement in basic skills has been a major goal of this school system for the past 2-3 years. A high expectation level would indicate teacher conformity to this goal. Commitment and satisfaction may be viewed as indicators of loyalty (or the opposite of alienation). Behavioral conformity is measured in terms of attendance, attendance being essential for any teaching activity to take place. This information was obtained from records in the district's Central Office.[7]

Student achievement was measured by using the standard scores of third and sixth graders (representing the primary and intermediate levels of education) on reading and math Metropolitan Achievement Tests, which were administered in May 1981. Because we are interested in the school as an organization, the school is the unit of analysis. The data were, thus, aggregated at the school level. In the case of achievement, each school has four separate achievement measures: the average third grade reading score, the average third grade math score, the average sixth grade reading score, and the average sixth grade math score. The number of schools in the analysis is different, depending on whether we are using the sixth or third grade scores, because nine of the elementary schools are either K-4 or K-5 schools. Therefore, when we use third grade scores as the dependent variable, the sample consists of 52 schools, but when we use sixth grade scores, the sample consists of 43 schools.

The degree of professionalism of the staff is determined by both years of teaching experience and level of professional training. A median score was established and the schools were then divided into two groups - the more professional schools were those whose average score was at or above the median and the less professional schools were those scoring below the median.

Results

The correlation matrix is shown in Table 1. The sixth grade reading and math scores are highly correlated with one another (.80), as are the third grade scores (.75). There are positive correlations among the conformity variables - especially between the two attitudinal conformity indicators. There are also positive correlations between the conformity variables and sanctions. Feedback and the conformity variables are positively associated with student achievement, and the sanctions mode of control is negatively associated. The relationships between the control variables and achievement are not significant, however.

(INSERT TABLE 1 HERE)

We refined the path model to take account of the two types of conformity. Feedback affects achievement indirectly through its effect on both behavioral and attitudinal conformity which, in turn, directly affect achievement.

Figures 2 through 5 outline the path coefficients using the feedback/-socialization mode of control. As is shown, there are relationships between feedback and conformity, but the strength of the relationship varies depending on type of conformity. Feedback is more highly correlated with attitudinal conformity than with behavioral conformity. The correlation between feedback and expections is .52 and that between feedback and commitment is .55. These figures are considerably higher than that for the relationship between feedback and behavioral conformity (.23). In all cases,

however, the relationships are positive. The more frequent the use of feedback mechanisms of social control (classroom visits, formal and informal professional contact, feedback, regarding performance), the greater the conformity on the part of teachers - attitudinal conformity in terms of expectations for student achievement and commitment to education, and to a lesser extent behavioral conformity in terms of attendance.

(INSERT FIGURES 2 THROUGH 5 HERE)

As noted in Table 1, the conformity variables are all positively related to one another. When they are put into a regression equation and related to achievement, the zero order correlations between attendance and achievement and between commitment and achievement are reduced considerably. Teacher expectations and achievement are positively and significantly related to one another in all cases.[8] The path which is the most meaningful, then, is that between feedback, the attitudinal conformity variable of teacher expectations for student achievement and student achievement.

The path between feedback, behavioral conformity and achievement makes some contribution to the variance in achievement, but the path between feedback, teacher commitment and achievement is of little consequence - except in the case of sixth grade reading. The figures showing the indirect effects of feedback on achievement are shown in Table 2.

(INSERT TABLE 2 HERE)

Since the indirect effects are slightly higher than the zero order correlations, clearly the relationship between feedback and achievement is through the intervention of teacher conformity. Together these conformity variables account for 23-30 percent of the variation in student achievement between schools. All F values are significant. Given that this is only one piece of the pie as far as student achievement is concerned, we think that the impact of these variables is noteworthy.

The sanctions mode of control operates in a very different way from feedback in that the relationships with the conformity variables are negative. Thus, the ultimate impact on student achievement is negative as well. The path coefficients are shown in Figures 6 and 7 (using 6th grade scores only). Table 3 gives the indirect effects of the sanctions mode of control on all the achievement scores.

(INSERT FIGURES 6 AND 7 AND TABLE 3 HERE)

Of the two control variables, feedback is the stronger one in that its indirect effects are greater than those of the sanctions mode. The gains using feedback are thus greater than the losses using sanctions. This is due to the fact that there is a stronger positive correlation between feedback and teacher expectations than there is a negative correlation between sanctions and expectations, and teacher expectations is the strongest variable related to achievement. It should be noted here that these two modes of control are not mutually exclusive. The relationship between them is -.17 (see Table 1).

The next item addressed in our analysis is that regarding the differences between more professional and less professional schools. Our expectation was that the positive correlations between feedback and conformity and the negative correlations between sanctions and conformity will be greater in those schools with a more professional staff. The argument here is that those who are more educated and experienced consider themselves more competent and therefore more capable of making decisions regarding instructional strategies within the classroom. They would respond more to an administrative style that is supportive, suggestive and concerned with the improvement of instruction, and respond less to a directive, authoritarian style than those who are less sure of themselves.

Figures 8 through 11 contrast the more professional and less professional schools - using sixth grade scores only. Because teacher expectations was the stronger attitudinal variable and because of the reduced sample size, commitment was eliminated from the regression equations in this analysis.

(FIGURES 8 THROUGH 11 HERE)

As can be seen from Figures 8 through 11, our predictions are not born out. There is virtually no difference in the effect of feedback on conformity between the more and less professional schools. Regarding the effects of sanctions on conformity, the results are quite the opposite of our expectations. In the less professional schools the relationships are far more negative. Absenteeism is higher and expectations are lower when the sanctions mode of control is utilized in these schools. Keeping in mind that the study was conducted in a large urban bureaucratic school system, it may be that teachers who have been around longer have stopped fighting the system and so are less negatively affected by its authoritative elements. It may also be that their own feelings of competency in the classroom make them less vulnerable to negative influences. Whatever the reasons, we can conclude, based on these findings, that the feedback mode of control has positive effects on conformity, especially attitudinal conformity, regardless of the degree of professionalism of the staff. However, the sanctions mode of control can "wipe out" the positive effects of feedback in those schools with a less professional staff.

The relationships between conformity and achievement are quite different in the case of sixth grade scores between the more professional and less professional schools. (These differences were not evident in the case of third grade scores: the expectations and reading correlations were .43 and .41 respectively, and the expectations and math correlations were .44 and .50

respectively.) The correlation between attitudinal conformity (expectations) and sixth grade achievement is very high (.88 reading, .81 math) in the more professional schools and virtually nil in the less professional schools (.21 reading, .03 math). Two possible explanations come to mind. One is that in the upper grades there is an interactive effect between teacher expectations and competency such that a more competent teaching staff with high expectations has the ability to translate those attitudes into behaviors which enhance student learning. A less competent staff has less ability to affect learning, regardless of their expectations.

Another explanation has to do with the small sample sizes. As noted earlier, there are fewer schools when we use sixth grade scores because not all schools in the district have grade levels that high. In the breakdown here, the number of more professional schools is 27, but only 22 are in the sample when sixth grade scores are used. The number of less professional schools is 24, reduced to 20 when sixth grade scores are used. There are probably some distortions in the beta coefficients due to the small numbers.

Summary and Discussion

We have accepted as given that coordination and control are necessary processes in organizations in order to ensure conformity to organizational requisites, and that schools are semi-professional organization with teachers becoming more professional as the teaching activity becomes more complex. We then hypothesized that greater reliance on the feedback/socialization mode of control would be more effective in terms of teacher conformity - presuming a "goodness of fit" between organizational task and control mechanism utilized, and further, that greater teacher conformity would impact positively on student achievement. Thus, the type of social control used ultimately affects outcome. We tested this hypothesis using indicators of both attitudinal and

behavioral conformity.

Data from elementary schools in a large urban school system confirm this hypothesis, with the relationship being strongest in the case of one of the attitudinal conformity variables, that of teacher expectations of student achievement. The use of feedback as a mode of control resulted in higher teacher expectations for student achievement which, in turn, led to higher student achievement.

We also hypothesized that an alternative mode of control, a reliance on sanctions, would have a negative effect on conformity and thus on achievement. This, too, was confirmed by the data. As noted earlier, and as the correlation between the two indicates, these two modes of administrative control are not mutually exclusive. Therefore, it is important to add that the positive effects of feedback were greater than the negative effects of sanctions.

Although the above relationships were predicted to be true for all schools, the expectation was that the correlations would be higher in more professional schools. This did not turn out to be the case. In fact, the negative relationships between the sanctions mode of control and both attitudinal and behavioral conformity were much greater in the less professional schools. This could be a function of a large bureaucratic school system in that those who opt to remain as teachers become more tolerant of authoritative structures. It might also be that greater competency acts as a buffer against negative influences. Such speculations bear further investigation.

The crucial question for us was the link between control, conformity, and outcome. A strong argument has been made that there isn't a great deal that schools can do to affect achievement, since a student's home background is so

influential (see Coleman, 1966; Burkhead, Fox and Holland, 1967; Jencks, 1972).[9] By viewing the school as an organization, one gets away from putting the onus of a school's failure to educate students on the student him/herself. Granted, unlike the "raw materials" of manufacturing organizations, students are not passive - they are not merely empty receptacles into which knowledge is poured - but are rather active and reactive beings who can affect their own learning. Nevertheless, schools like manufacturing organizations, vary in their degree of effectiveness (however one wishes to measure effectiveness), regardless of the make-up of the student population. We have not taken into account the socioeconomic make-up of the student population here, but mention should be made. In our sample the average percentage of economically disadvantage students[10] (the only indicator of socioeconomic background available to us) is 81 with a standard deviation of 11. This, in virtually all of the schools, a vast majority of the students are economically disadvantaged. In a correlation matrix the relationship between percentage of economically disadvantaged and achievement ranged from -.32 to -.61, so we can assume that it is a variable which does impact upon achievement scores. However, it is <u>not</u> related to feedback (-.02), or to attendance (-.06), only slightly to commitment (-.15) and somewhat more to teacher expectations (-.33). The latter variable remained a significant determinant of achievement even when percentage disadvantaged was taken into account, We, thus, feel our model is a valid one as it stands and the relationship between feedback, teacher conformity, and student achievement is real.

Teachers respond positively to an atmosphere within the school which allows for more frequent interpersonal contact, be it administrator-teacher or teacher-teacher contact. In such an atmosphere ideas can be exchanged regarding the teaching activity and problems encountered therein. This

positive response, in the form of higher expectations for achievement, and to a lesser extent, higher attendance rates and a greater commitment, results in higher student achievement. High expectations for achievement affect teacher behaviors in the classroom which have to do with the teaching-learning process. We need to know what those behaviors are, but that is the subject for another study. Our concern is primarily at the administrative level in terms of how principals affect teacher attitudes and behaviors.

The path model pursued in this study allows us to better understand what kinds of administrative behaviors affect what kinds of teacher attitudes and behaviors. Conceivably, teacher attendance and teacher morale are both desirable outcomes in a school system regardless of their impact on student achievement. This raises the question of multiple goals. In our model, if maximizing student achievement is the goal to be pursued, then it should be done by maximizing teacher expectations, utilizing a feedback mode of control. If maximizing teacher attendance were the goal here, then neither model of control, as measured in this study, is particularly effective when we look at the total group of schools (feedback/attendance = .23; sanctions/attendance = -.27). In the less professional schools, however, the negative relationship between sanctions and attendance is considerable (-.63), far greater than the positive relationship between feedback and attendance (.29). Thus, the message is that the sanctions mode should be consciously avoided if increasing attendance is the desired outcome. The implications of all this are that it is difficult to maximize multiple goals when the processes leading to one or another are at odds. Administrators <u>can</u> affect student achievement. They can affect achievement more when doing so becomes a primary goal, and when they use feedback as opposed to sanctions as a way of achieving coordination and control.

Table 1

Zero Order Correlations of all Variables

		1	2	3	4	5	6	7	8	9
1.	Feedback	1.00								
2.	Sanctions.	-.17	1.00							
3.	Attitudinal Conformity Expectations	.52**	-.32**	1.00						
4.	Attitudinal Conformity Commitment	.55**	-.40**	.58**	1.00					
5.	Behavioral Conformity	.23*	-.27*	.50**	.14	1.00				
6.	Read 6	.30*	-.18	.56**	.40*	.31*	1.00			
7.	Math 6	.21	-.13	.47**	.27*	.32*	.80*	1.00		
8.	Read 3	.18	-.11	.48**	.18	.37**	.49**	.51**	1.00	
9.	Math 3	.15	-.12	.47**	.25*	.32*	.47**	.57**	.75**	1.00

*p < .05
**p < .01

Table 2

Indirect Effects oF Feedback on Achievement Scores

	Indirect Effect	Zero Order Correlation
Read 6	.32	.30
Math 6	.26	.21
Read 3	.22	.18
Math 3	.24	.15

Table 3

Indirect Effects of Sanctions on Achievement Scores

	Indirect Effect	Zero Order Correlation
Read 6	-.20	-.18
Math 6	-.18	-.12
Read 3	-.15	-.11
Math 3	-.16	-.12

Figure 1

Path Model for Relationships Between Social Control, Teacher Conformity and Student Achievement

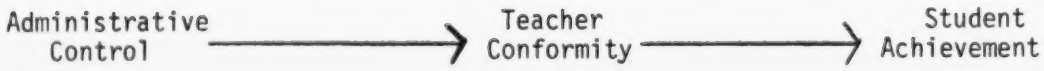


Figure 2

Path Diagram Relating Sixth Grade Reading Scores to Conformity and Feedback N=42

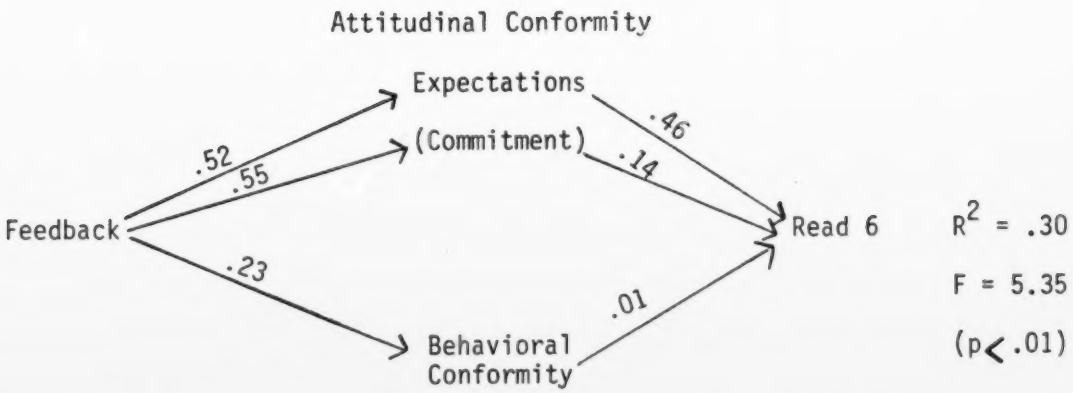


Figure 3

Path Diagram Relating Sixth Grade Math Scores to Conformity and Feedback N=42

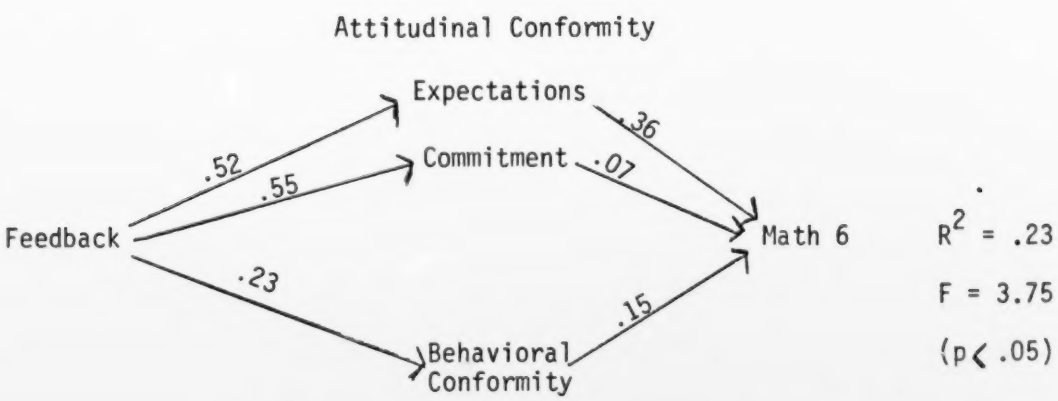


Figure 4

Path Diagram Relating Third Grade Reading Scores to Conformity and Feedback N=51

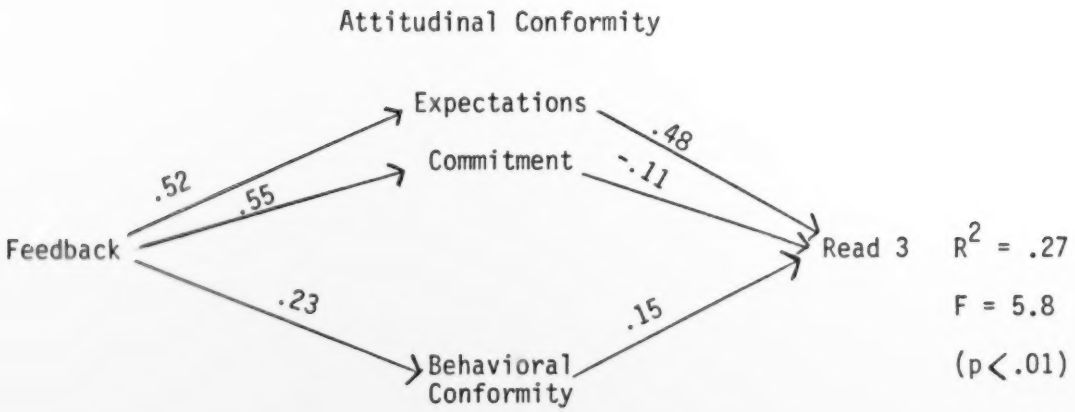


Figure 5

Path Diagram Relating Third Grade Math Scores to Conformity and Feedback N=51

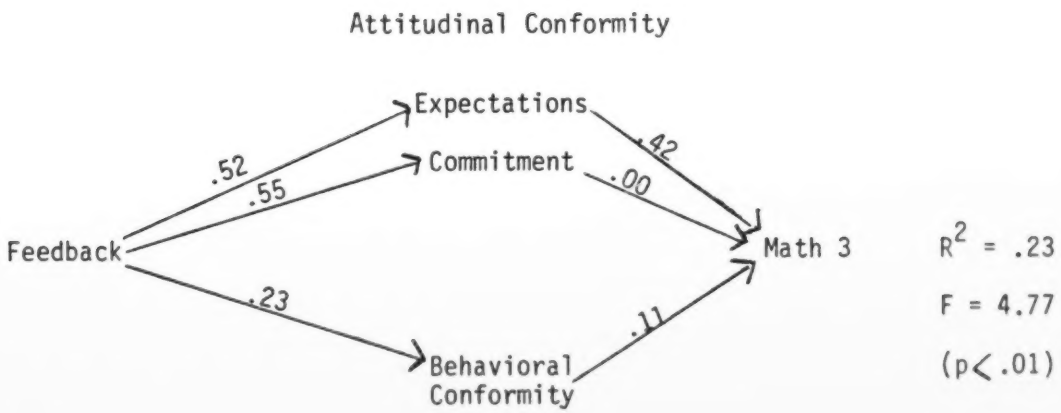


Figure 6

Path Diagram Relating Sixth Grade Reading Scores to Conformity and Sanctions

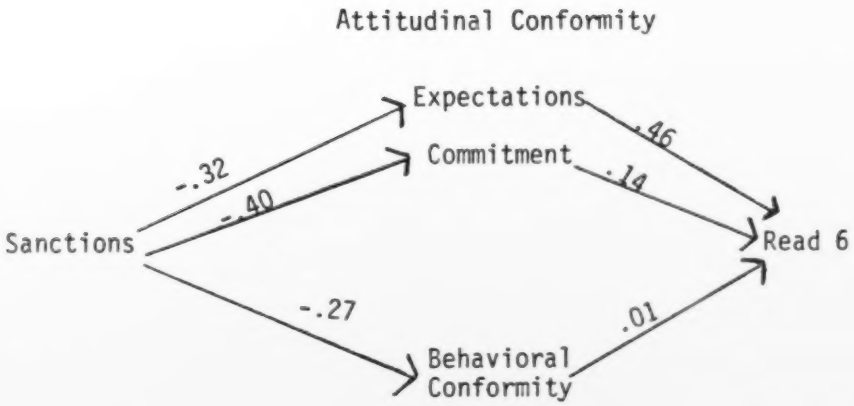


Figure 7

Path Diagram Relating Sixth Grade Math Scores to Conformity and Sanctions

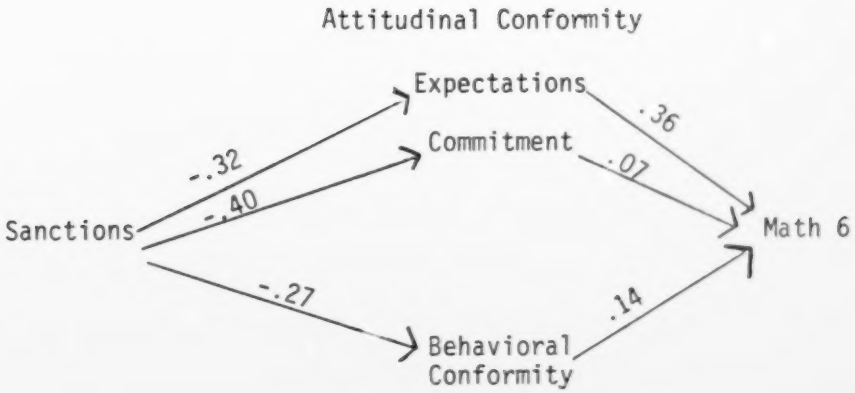


Figure 8

Path Diagram Relating Sixth Grade Achievement Scores to Conformity and Feedback: More Professional Schools

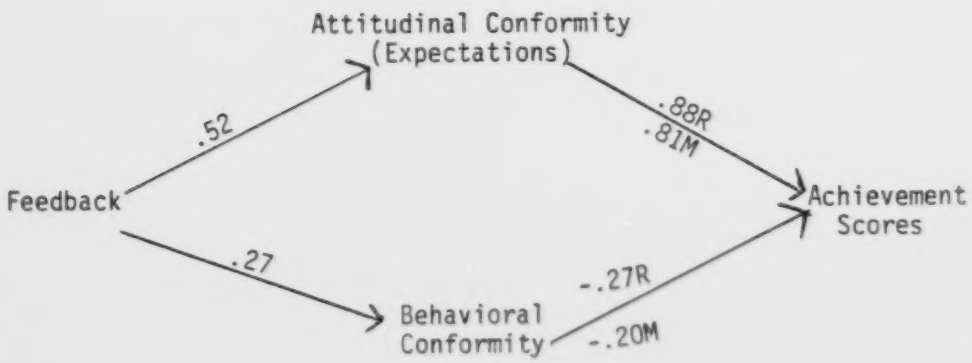


Figure 9

Path Diagram Relating Sixth Grade Achievement Scores to Conformity and Feedback: Less Professional Schools

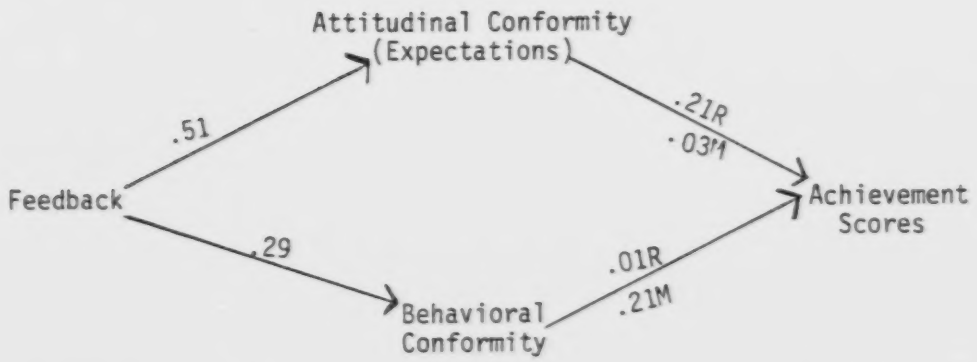


Figure 10

Path Diagram Relating Sixth Grade Achievement Scores to Conformity and Sanctions: More Professional Schools

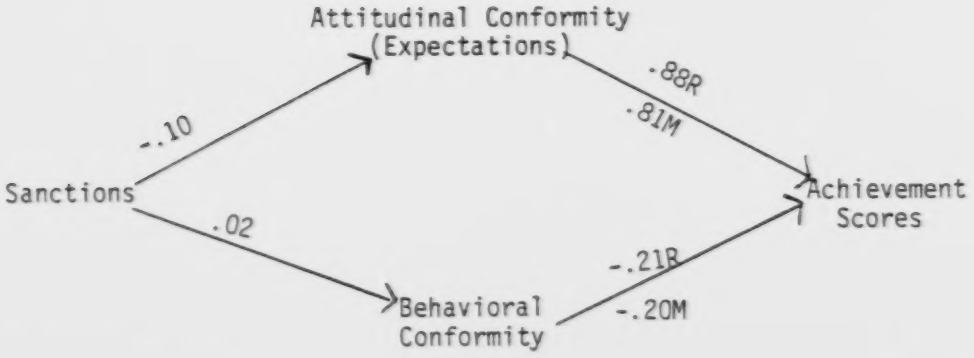
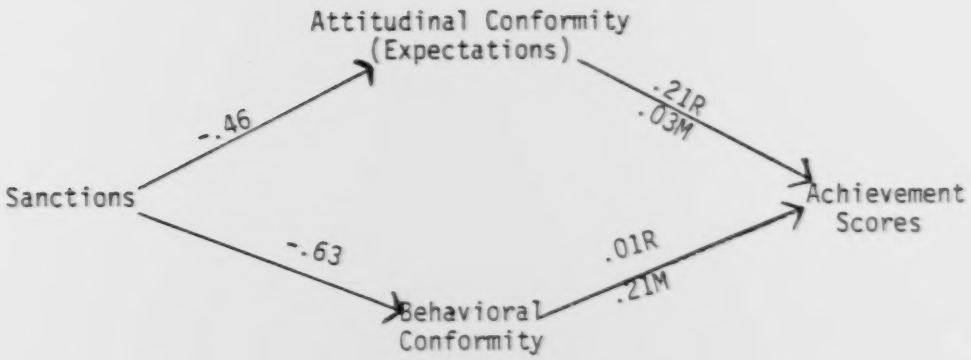


Figure 11

Path Diagram Relating Sixth Grade Achievement Scores to Conformity and Sanctions: Less Professional Schools



Notes

1. Etzioni (1975) utilizes three types of compliance structures: coercive, utilitarian, and normative, Warren (1968) delineates five bases of power (from an earlier work by French and Raven): coercion, reward, referent, legitimate, and expert. Hage has dichotomized the number, noting that the main distinction is between the use of positive or negative sanctions on one hand, and positive or negative socialization, on the other (1980, p. 353).

2. That the degree of task diversity or complexity is one of the structural variables influencing the type of coordination or control utilized is illustrated in the work of Thompson (1967), Lawrence and Lorsch (1967), and Burns and Stalker (1961). The degree of task uncertainty also has an impact (Perrow, 1967). The teaching activity is an uncertain one as well as a diverse one - if the particular learning needs of each child are to be met.

3. Questionnaires were also distributed to principals and sixth grade pupils as part of a larger study on the determinants of school effectiveness (Azumi and Madhere, 1982). Only teacher questionnaire items are being used in this study.

4. The specific questionnaire items included in the measure of feedback (alpha = .82) are:

   a) How often does an administrator in this school visit your classroom?

   b) How often are teachers provided with feedback about their professional performance?

   c) How often do you have formal or scheduled professional contact with others in your school?

   d) How often do you have informal or unscheduled professional contact with others in your school?

   Initially, there were eight items included. Factor analysis reduced the number to four. Each of the above had a factor loading of .50 or higher. The questionnaire items were all answered on a four point scale.

5. The specific items used to measure the sanctions dimension of control (alpha = .65) are:

   a) Teachers have to follow procedures which often conflict with their own judgment.

   b) There can be little action taken here until a superior approves it.

These items were answered on a four point agreement scale.

As in the case of the feedback indicator, the factor loadings on these items were .50 or higher.

6. Teacher expectations were measured by the following questions (alpha = .93):

   a) On the average, what level of achievement can be expected of students in your class?

   b) What percentage of students in your class do you expect to finish high school?

   c) What percentage of students in your class do you expect to attend college?

   d) From your observations, what percentage of teachers in this school believe that all of their students can achieve minimum basic levels of competence in reading and math?

   e) How many students in this school do you think the principal expects to complete high school?

   f) What percentage of students in this school do you think the principals expects to attend college?

   Teacher commitment was measured by the following (alpha = .92)

   a) To what extent do you feel satisfied in teaching at this school?

   b) There is a high level of commitment to education among staff members.

   c) Teachers feel a sense of pride in their work.

   Again, all items were to be answered on a four point scale. All items had factor loadings of .50 or higher.

7. The measure is the average number of days absent, by school, for the 1980-81 school year for classroom teachers only.

8. All the beta coefficients for the teacher expectation variable were significant at the .01 level. Those for behavioral conformity were not significant.

9. Coleman's latest study, comparing public and private schools, does argue that private schools have characteristics of positive benefit to student achievement that public schools do not have.

10. This figure was calculated by dividing the average daily number of free lunches served by the average daily attendance - for the month of February 1981.

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